

REFLECTIVE WARNING AND LOCATOR COLLAR FOR  
HYDRANTS, PYLONS AND SUPPORT POSTS

5

Priority is hereby claimed to United States Provisional Patent  
Application 60/140,739, which was filed on June 25, 1999.

BACKGROUND OF THE INVENTION

1. Field of the Invention

10

The present invention relates to the field of fire hydrants,  
and also to pylons and support posts found both on land and in  
water, and a reflective or fluorescent means to identify or warn of  
their location.

2. Description of the Prior Art

15

20

25

Fire hydrants are a part of every day life and in most  
communities they are located in spaced apart relationship in order  
to provide a source of water to fireman in fighting a fire within  
the proximity of the particular hydrant. Fire hydrants are  
recognized in our daily travels, but their exact location does not  
often register in our minds. The same holds true for fire fighters  
when responding to a fire when they visually identify the location  
of the nearest hydrant as a result of their bright color. However,  
in the hours of darkness and other periods of low visibility, the  
fire hydrants, even though brightly colored, may not be readily  
identifiable to the fire fighters and the inability to locate the

fire hydrant may delay the commencement of the fire fighting activities and thus endanger not only property, but life.

In such situations of low visibility or darkness, in warm and temperate climates, a solution to the problem has been to embed in the concrete or asphalt proximate to the fire hydrant, a reflective or fluorescent member which is easily visible to the fire fighter for identifying the location of a fire hydrant.

This solution has not been available in colder climates which experience a winter period where snow may be prevalent which may cover the reflective or fluorescent identifier. Still further, in such climates, snow removal may have a deleterious affect on the reflective or fluorescent identifier embedded in the concrete or asphalt adjacent the fire hydrant such that its life span is limited.

Therefore there exists the need for a reflective or fluorescent member that can be easily secured to or about a fire hydrant which at night or low visibility situations will easily identify the location of the hydrant to the fire fighters.

The same type of an assembly can find application in night time, low visibility or low illumination situations with respect to pylons and supports in bodies of water, such as pylons supporting a duck blind, pylons or supports supporting a pier or wharf, and

pylons or supports along traffic thoroughfares where there is little or no street lighting, such as country roads or the like. Further application may also be had to utility poles of aluminum, steel or concrete which line many unilluminated country roads.

5 OBJECTS OF THE INVENTION

10 An object of the present invention is to provide for a novel reflective and/or fluorescent member readily securable about a fire hydrant such that the reflective and/or fluorescent capabilities serves to identify the location of the fire hydrant to fire fighters in low visibility situations.

Another object of the present invention is to provide for a novel reflective and/or fluorescent member which is readily securable about a fire hydrant and not facilly removable therefrom.

Another object of the present invention is to provide for a novel reflective and/or fluorescent member which is readily mountable about a pylon or support member partially submerged in a body of water to identify the location of the pylon or support member to water craft in low visibility situations.

20 A still further object of the present invention is to provide for a novel reflective and/or fluorescent member which is readily securable about a pylon or support, which pylon or support may be partially submerged in a body of water, the reflective and/or

fluorescent member being constructed so as to be impervious to the deleterious affects of the body of water.

A still further object of the present invention is to provide for a novel reflective and/or fluorescent member which is readily securable about a utility pole, aluminum, steel or concrete street light pole, or pylon or other support which may be positioned proximate a thoroughfare and not easily visible in low visibility situations.

#### SUMMARY OF THE INVENTION

A warning and locator assembly for mounting about a fire hydrant or vehicle obstacle to aid in the warning or identifying of its location, the assembly having the flexible member having an extruded channel defining a slot for the slidable receipt of a substrate and laminated reflective material secured thereto, the reflective material, substrate and extruded channel having a plurality of cooperative apertures therethrough proximate the end of the extruded channel for receipt of a fastening means to secure the assembly in a collar like fashion about the circumference of a fire hydrant or vehicle obstacle.

#### BRIEF DESCRIPTION OF THE DRAWINGS

These and other objects of the present invention will become evident, particularly when taken in light of the following

illustrations wherein:

Figure 1 is a prospective exploded view of the warning and locator collar in a planar mode;

Figure 2 is a top view of the warning and locator collar;

Figure 3 is an end view of the warning and locator collar;

Figure 4 is a front view of the warning and locator collar secured about a fire hydrant; and

Figure 5 is a front view of the warning and locator collar positioned about a partially submerged pylon.

#### DETAILED DESCRIPTION OF THE DRAWINGS

Figure 1 is a prospective exploded view of the warning and locator collar assembly 10. It is comprised of an extruded elongated channel 12 which is flexible and which is fabricated of a weather resistant polymer such as polyethylene or the like. Extruded channel 12 is defined by a web 14, depending flanges 16 and 18 which depend from first side 20 of web 14 and which terminate in inwardly turned fingers 22 and 24 respectively. This construction defines a slot 26 formed by web 14 and depending flanges 16 and 18 and inwardly turned flanges 22 and 24 for the slidable receipt of a reflective material 28 which may or may not be laminated to a substrate 30.

Extruded channel is flexible so that it may be formed into a

collar about a fire hydrant or vehicle obstacle and the reflective material 28 and substrate 30 would be similarly flexible to allow for such circumscription about a fire hydrant or vehicle obstacle.

Extruded channel 12 and the reflective and substrate material 28 and 30 respectively, slidably receivable therein, have a plurality of alignable apertures or slots 32 therethrough proximate their respective ends 34, 36 and 38, 40 for the receipt of a fastening means 42. Depending upon the nature of the device or obstacle about which the locator and warning collar is circumscribed, the fastening means 42 may serve to fasten the two ends of the locator and warning collar 10 together or the fastening means 42 may serve to secure the opposing ends of the locator and warning strip 10 together and simultaneously penetrate the pylon or vehicle obstacle about which it is being circumscribed.

Figure 2 is a top view of the warning and locator collar assembly 10 illustrating the slidable receipt of reflective material 28 and substrate 30 within slot 26. Figure 3 is an end view of the warning and locator strip 10 with the reflective material 28 and substrate 30 positioned within slot 26.

Figure 4 is a front view of the warning and locator collar 10 secured about a fire hydrant 40 providing a visually reflective signal to fire fighters of the location of a fire hydrant. Warning

and locator collar assembly 10 is particularly adapted for use on  
fire hydrants due to the shape of the fire hydrant 40. Fire  
hydrant 40 is characterized by a top 42 having a flange portion 44.  
Top 42 provides the fire fighter with access to the valve opening  
5 mechanism in order to commence the flow of water. About the  
cylindrical body 46 of fire hydrant 40 are a plurality of hose bib  
flanges 48, the covers of which are removable by the fire fighter  
in order to attach a fire hose. The warning and locator collar  
assembly 10 would be secured about fire hydrant 40 between its  
10 upper flange portion 44 and the plurality of hose bib flanges 48.  
The warning and locator collar assembly 10 would circumscribe the  
hydrant body 46 at this location and be secured with an aluminum  
rivet and end cap or other suitable securing means. The warning  
and locator collar assembly 10, positioned in such a fashion, is  
15 not easily removable from the hydrant 40 by unauthorized persons  
due to the difficulty in gaining access thereto as it is positioned  
between the top flange 44 and the hose bib flanges 48.

The reflective material 28 utilized in warning and locator  
collar assembly 10 may also be varied to serve as a further  
20 indicator to firemen. The normal color for identifying a hydrant  
which was active, that is capable of supplying a source of water,  
is blue, and therefore active hydrants would have a warning and

5  
10  
15  
20  
25  
30  
35  
40  
45  
50  
55  
60  
65  
70  
75  
80  
85  
90  
95  
100  
105  
110  
115  
120  
125  
130  
135  
140  
145  
150  
155  
160  
165  
170  
175  
180  
185  
190  
195  
200  
205  
210  
215  
220  
225  
230  
235  
240  
245  
250  
255  
260  
265  
270  
275  
280  
285  
290  
295  
300  
305  
310  
315  
320  
325  
330  
335  
340  
345  
350  
355  
360  
365  
370  
375  
380  
385  
390  
395  
400  
405  
410  
415  
420  
425  
430  
435  
440  
445  
450  
455  
460  
465  
470  
475  
480  
485  
490  
495  
500  
505  
510  
515  
520  
525  
530  
535  
540  
545  
550  
555  
560  
565  
570  
575  
580  
585  
590  
595  
600  
605  
610  
615  
620  
625  
630  
635  
640  
645  
650  
655  
660  
665  
670  
675  
680  
685  
690  
695  
700  
705  
710  
715  
720  
725  
730  
735  
740  
745  
750  
755  
760  
765  
770  
775  
780  
785  
790  
795  
800  
805  
810  
815  
820  
825  
830  
835  
840  
845  
850  
855  
860  
865  
870  
875  
880  
885  
890  
895  
900  
905  
910  
915  
920  
925  
930  
935  
940  
945  
950  
955  
960  
965  
970  
975  
980  
985  
990  
995  
1000

locator collar assembly 10 incorporating a blue reflective material 28. If a hydrant 40 was inactive, that is not capable of supplying water for whatever reason, it could be identified with a different reflective material 28 thereby identifying it to firemen as an inactive hydrant such that precious time is not wasted in attempting to secure fire hoses thereto. Additionally, a message stating "NOT IN SERVICE" or ownership identification can be screen printed to the reflective strip.

Figure 5 is a front view of the warning and locator collar assembly 10 secured to a vehicle obstacle 50. The vehicle obstacle 50 could be of many types or forms. For instance, it could represent a utility pole proximate the edge of an unlit roadway thus presenting a potential hazard or obstacle to a land based vehicle. Vehicle obstacle 50 could also be in the form of a pylon or pier support on a waterway. It is this latter type obstacle that is illustrated in Figure 5 in the form of a partially submerged pylon or pier support 50 supporting a platform 52, support 50 being partially submerged in body of water 54. In this configuration, the warning and locator collar assembly 10 is wrapped about the pylon or pier support 50 so as to circumscribe its circumference and the fastening means 42 would be secured through apertures 32 to maintain the warning and locator strip



assembly 10 in its circumscribed position. Depending upon the nature of the material constituting the pylon or pier support, the fastening means 42 may only be required to secure the ends of the warning and locator collar assembly 10 in order to maintain its position about the pylon or pier support 50. Alternatively, a fastening means may be used which not only secures the ends of the warning and locator collar assembly 10 in such a circumscribed position, but may also penetrate the pylon or pier support in order to maintain the circumscribed location of the warning and locator collar assembly 10.

The stratum 30 is not required with respect to the locator and warning assembly if the reflective material 28 is fabricated of a flexible, yet semi-rigid material. However in the preferred embodiment, the reflective material 28 is laminated to a substratum layer 30 which is flexible and semi-rigid and which is fabricated of materials which will be resistant to the weather and corrosion. In that regard, the substratum 30 could be comprised of a suitable polymer, or aluminum or stainless steel of suitable thickness to provide the flexibility for wrapping the assembly as heretofore disclosed.

While the present invention has been described with respect to the exemplary embodiments thereof, it will be recognized by those

